

20-2-17/50

On the Causes of the Non-Agreement of the Kinetic Theory of High Elasticity With
the Experiment

of free energy is given. There are 1 figure and 18 references, 5
of which are Slavic.

PRESENTED: April 20, 1957, by P. A. Rebinder, Academician

SUBMITTED: April 12, 1957

AVAILABLE: Library of Congress

Card 3/3

PRISS, L.S.

Causes of departure from the kinetic theory of high elasticity.
Part 1. Zhur. tekhn. fiz. 28 no.3:636-646 Mr '58. (MIRA 11:4)

1. Nauchno-issledovatel'skiy institut shinnoy promyshlennosti, Moskva.
(Elasticity)

PRISS, L.S., Cand Phys Math Sci -- (diss) "Certain problems
of the statistical theory of high elasticity." Mos, Len, 1959,
14 pp (Sci Res Inst of ^RTime Industry. Inst of High Molecular
Compounds of Acad Sci USSR) 150 co ies (KL, 33-59, 110)

- 4 -

KHROMOV, M.K.; PRISS, L.S.; REZNIKOVSKIY, M.M.

Further investigation of methodological problems concerning
rubber fatigue tests. Trudy Nauch.-issl. inst. shin. prom.
no.7:5-20 '60. (MIRA 14:8)

(Rubber--Testing)

S/081/61/000/021/089/094
B107/B147

AUTHORS: Khromov, M. K., Priss, L. S., Reznikovskiy, M. N.

TITLE: Further investigation of methodic problems in the field of rubber fatigue tests

PERIODICAL: Referativnyy zhurnal. Khimiya, no. 21, 1961, 465, abstract 21P174 (Tr. N.-i. in-ta shin. prom-sti, sb. 7, 1960, 5-20)

TEXT: The authors describe a number of new methods and give recommendations for rubber fatigue tests. On a special device, rubbers were tested in various gas media by an alternating torsion-bending test. In nitrogen (0.3 - 0.5% O₂) as compared with air, the working capacity rises for

HK(NK) rubber to the 3-4 fold, CKH(SKI) and CKC-3OAM (SKS-3OAM) to the 2-3 fold, and CKB(SKB) by 25-30%. Bending fatigue tests showed different sensitivities to stress concentrations for rubber of different compositions. These concentrations were produced by notches of different depths. Among the rubbers mentioned, NK showed the highest, SKB the lowest stability to the growth of the notch. Dumbbell samples were used for testing rubbers for fatigue under alternating dilatation compression. Card 1/2

Further investigation of methodic ...

S/081/61/000/021/089/094
B107/B147

The asymmetry of the deformation cycle showed a considerable effect on the working capacity of rubber. The authors describe a method and device for testing rubber for fatigue with symmetrical shearing by producing torsional vibrations of the dumbbell sample. The curves for the fatigue strength as a function of the amplitude of dynamic deformation of shearing for NK and SKB rubber are intersecting. It is recommended to examine the fatigue properties of rubber with deformation amplitudes characteristic of the work of the material in the workpiece. The interaction of rubber with the medium, the appearance of local stress concentrations on the sample surface, and the asymmetry of the deformation cycle should be taken into account. [Abstracter's note: Complete translation.] ✓

Card 2/2

PRISS, L.S.

Expression for the resilience potential of strained rubber in the
nonequilibrium state. Vysokom. soed. 2 no.2:313 F '60.

(MIRA 13:11)

(Rubber)

REZNIKOVSKIY, M.M.; PRISS, L.S.; KHROMOV, M.K.

Relation between the fatigue resistance, strength, hysteresis,
and chemical stability of rubbers. Koll.zhur. 21 no.4:
458-463 J1-Ag '59. (MIRA 13:8)

1. Nauchno-issledovatel'skiy institut shinnoy promyshlennosti,
Moskva.

(Rubber--Testing)

PRISS, L.S.

Dynamic properties of viscoelastic materials in anharmonic loading.
Vysokom. soed. 2 no.9:1309-1319 S '60. (MIRA 13:9)

L. Nauchno-issledovatel'skiy institut shinnoy promyshlennosti.
(Materials--Testing) (Strains and stresses)

S/138/60/000/003/007/007

A051/A029

AUTHORS: Tarasova, Z.N.; Priss, L.S.; Smirnova, L.A.

TITLE: The VII Scientific Conference for High-Molecular Compounds III

PERIODICAL: Kauchuk i Rezina, 1960, No. 3. p. 54

TEXT: The VII nauchnaya konferentsiya po vysokomolekulyarnym soyedineniyam (VII Scientific Conference on High-Molecular Compounds) took place on February 8 - 13, 1960, in Leningrad. It was organized by the Institut vysokomolekulyarnykh soyedineniy (Institute of High-Molecular Compounds) (IVS) of the AS of the USSR. There were 57 papers presented on the following subjects: the mechanism of polymerization and destruction, stereo-regular polymers, the synthesis of polymers, the mechanical properties of polymers, solutions of polymers, cellulose and its derivatives, the relaxation properties and structure of polymers, biopolymers. A paper on the investigation of molecular weight distribution of polycondensation products was presented by S.E. Bresler, Yu.Ya. Gotlib and S.Ya. Frenkel. Macroradicals were also investigated by these authors. A number of papers was dedicated to the subject of the effect of orientation and molecular weight on the strength and creeping of various polymers in the vitrified state. ✓

Card 1/2

S/138/60/000/003/007/007
A051/A029

The VII Scientific Conference for High-Molecular Compounds

Ye.V. Kuvshinskiy and M.Ye. Bessonov submitted a paper on the features of "silver cracks" in polymethylmethacrylate. The study of polymers by the method of dielectric loss was discussed in the paper by G.P. Mikhaylov and co-workers. An interesting method for determining the mobility of the chains of polymer molecules in a block was suggested by Ye.V. Anufriyeva. Over 600 specialists from more than 50 institutes took part in the conference. ✓

Card 2/2

S/190/60/002/009/003/019
B004/B060

AUTHOR: Priss, L. S.

TITLE: The Dynamic Properties of Viscous-elastic Substances
Under Anharmonic Stress

PERIODICAL: Vysokomolekulyarnyye soyedineniya, 1960, Vol. 2, No. 9,
pp. 1309-1319

TEXT: The author notes at the beginning that such rhythmical stresses as are applied in material tests hardly ever occur in practice. He therefore studied the effect of anharmonic stress on viscous-elastic substances. Fig. 1 shows typical examples of such a stress, and a terminology is defined at the same time (pulse duration, pause, pulse height, steepness of the pulse front, front and rear pulse front, plateau). The usual equations for harmonic stress are written down for the deformation ξ , the dynamic modulus E , $\tan \phi$ of the phase shift between tension and deformation, and the modulus K of internal friction. Moreover, the equations for anharmonic stress are derived by means of a three-element pattern, as well as a pattern with a continuous spectrum ✓

Card 1/2

The Dynamic Properties of Viscous-elastic
Substances Under Anharmonic Stress

S/190/60/002/009/003/019
B004/B060

of relaxation times (Fig. 2). These equations served for calculating deformation and tension as a time function (Fig. 3), ϕ as a function of the maximum values of deformation and tension (Fig. 4), K as a function of the duration of the pause (Fig. 5), and the ratio between differently long pauses (Fig. 6), K as a function of the time asymmetry of the stress cycle (Fig. 7), K as a function of the asymmetry of the stress sign (Fig. 8), and K as a function of the pulse plateau (Fig. 9). A table supplies the values of K/K_{harm} as a function of the steepness of deformation pulses. There are 9 figures, 1 table, and 5 references: 2 Soviet, 2 US, and 1 British.

ASSOCIATION: Nauchno-issledovatel'skiy institut shinnoy promyshlennosti
(Scientific Research Institute of the Tire Industry)

SUBMITTED: February 2, 1960

Card 2/2

TARASOVA, Z.N.; PRISS, L.S.; SMIRNOVA, L.A.

Seventh scientific conference on high molecular weight compounds. Kauch.i rez. 19 no.3:54 M^r '60. (MIRA 13:6)
(Macromolecular compounds--Congresses)

5(4).

SOV/69-21-4-14/22

AUTHOR: Reznikovskiy, M.M., Priss, L.S., Khromov, M.K.

TITLE: On the Relation Between the Fatigue Resistance, Strength,
Hysteresis and Chemical Stability of Rubbers

PERIODICAL: Kolloidnyy zhurnal, 1959, Vol XXI, Nr 4, pp 458-463 (USSR)

ABSTRACT: This is a comparative study of various factors as fatigue resistance, tensile strength, hysteresis and chemical stability, which determine the working capacity of natural and synthetic rubber products. The authors started from the assumption that also in the case of constant temperatures and stability of the other experimental conditions rubbers with high internal friction will be less resistant to dynamic fatigue. In order to verify this assumption, they compared the dynamic fatigue resistance of various rubbers differing by type, degree of vulcanization etc. with the corresponding indices of internal friction. The data used for this purpose were taken from a formerly published article [reference 5]. The general trend to a diminution of fatigue resistance in dependence on the growth

Card 1/4

SOV/69-21-4-14/22

On the Relation Between the Fatigue Resistance, Strength, Hysteresis and Chemical Stability of Rubbers

of internal friction is distinctly shown by the curves in graph 3, where the index f_{oy}/P (dynamic fatigue resistance at given working capacity/tensile strength) was plotted as a function of the modulus of internal friction for various rubbers. The considerable dispersion of the values is quite natural, as the compared rubbers do not differ only in internal friction. Such a dependence also holds for the index ϵ_{oy}/ϵ_p (fatigue deformation/ specific elongation), as this relation changes in accordance with f_{oy}/P (graphs 1 and 2). The data in table 1, which was obtained by the woman graduate student, L. Pevzner, of MITKHT imeni Lomonosova, permit still more definite conclusions. The table contains the results of comparative tests with vulcanized rubbers prepared on a butadiene styrene basis. The standard rubber mixture A of the table was varied by increasing the sulphur doses and reducing the amounts of added filler. The variations, however, left nearly intact the values of

Card 2/4

SOV/62-21-4-14/22

On the Relation Between the Fatigue Resistance, Strength, Hysteresis and Chemical Stability of Rubbers

tensile strength and of the dynamic modulus E . In this way four rubbers were obtained with consecutively decreasing values for filler content and internal friction modulus K . Testing of these rubbers, which was carried out under alternating bending at 100°C and a deformation amplitude of 20%, showed a monotonous increase of their working capacity in dependence on a diminution of the internal friction modulus. On the basis of the obtained results, the authors conclude that the experiments fully confirm the assumption of an inverse proportion between the internal friction of rubber and its fatigue resistance. The reduction of internal friction is also a very efficient method to increase the working capacity of rubber, as the lower the internal friction, the lower also the temperature, which develops in the ready product as a result of hysteresis. In order to illustrate the dependence of the relative significance of physical and chemical factors on fatigue conditions, the authors

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SOV/69-21-4-14/22

On the Relation Between the Fatigue Resistance, Strength, Hysteresis and Chemical Stability of Rubbers

have compiled data for natural polybutadiene rubbers (table 2). The data shows that aging and a rise in temperature affects the advantages, which are proper to natural rubber as compared to polybutadiene products. On the whole, the experiments have shown, that under identical experimental conditions, rubbers with great internal friction have a reduced working capacity. The fatigue resistance of rubbers is the greater the greater their tensile strength, their chemical stability and the lower their internal friction. The relative significance of each of these factors depends on the experimental conditions such as loading, temperature and surrounding medium. The authors express their gratitude for help to Professor B.A. Dogadkin. There are 3 graphs, 2 tables and 8 Soviet references.

ASSOCIATION: Nauchno-issledovatel'skiy institut shinnoy promyshlennosti,
Moskva (Scientific Research Institute of the Tire Industry,
Moscow)
SUBMITTED: 25 February, 1958
Card 4/4

SOV/124-57 4 5063

Translation from: Referativnyy zhurnal. Mekhanika, 1957, Nr 4, p 156 (USSR)

AUTHORS: Reznikovskiy, M. M., Vostroknutov, Ye. G., Priss, L. S.

TITLE: Methodological Problems in the Study of the Strength of Rubber Under Time-variable Stress Conditions (Metodicheskiye voprosy izucheniya prochnosti reziny pri peremennykh vo vremeni napryazheniyakh)

PERIODICAL: V sb.: Stareniye i utomleniye kauchukov i rezin i povyshe-
niye ikh stoykosti. Leningrad, Goskhimizdat, 1955, pp 76-88

ABSTRACT: The author suggests a method for the classification of the basic regimes of testing rubber for dynamic fatigue. All types of operational regimes may be referred to one of the four groups of tests suggested in the classification. New instruments for the dynamic tests of rubber are examined which make possible an analysis both of the fatigue strength, characterized by the number of the cycles before failure, and of the "exhaustion" characterized by changes in the material properties after repeated loading: 1) An instrument which makes possible the accomplishment of any of the dynamic regimes with an asymmetric loading cycle. Tests on this instrument are conducted under uniform tension and with a harmonic law of

Card 1/2

SOV/124-57-4-5063

Methodological Problems in the Study of the Strength of Rubber (cont.)

stress and strain variation. 2) An instrument for the study of the exhaustion and fatigue strength of rubber with a symmetrical loading cycle (with mean values of the stress and strain equal to zero), which in samples subjected to bending deformation makes possible the determination of the dynamic modulus and the losses per load cycle along with the fatigue strength.

L. S. Bryukhanova

Card 2/2

SOV/124-58-11-13591

Translation from: Referativnyy zhurnal, Mekhanika, 1958, Nr 11, p 228 (USSR)

AUTHORS: Reznikovskiy, M. M., ~~Priss, L. S.~~, Khromov, M. K., Vostroknutov, I. G.

TITLE: Problems of Methodology in the Fatigue Testing of Rubber With Repeated Loads (Metodicheskiye voprosy ispytaniya reziny na ustalost' pri mnogokratnom nagruzhении)

PERIODICAL: Tr. N. -i. in-ta shin. prom-sti, 1957, Nr 4, pp 5-35

ABSTRACT: An examination of the problems arising in fatigue-performance testing; novel, more highly perfected, methods for comparative tests are recommended.

Reviewer's name not given

Card 1/1

AUTHOR: Priss, L. S.

57-28-3-27/33

TITLE: Causes of the Deviations From the Kinetic Theory of High Elasticity (Prichiny otkloneniy ot kineticheskoy teorii vysokoelastichnosti).
I. The Taking Into Account of the Modification of Transverse Dimensions of the Chains in Deformations of the Network (I. Uchet izmeneniya poperechnykh razmerov tsepey pri deformatsii setki)

PERIODICAL: Zhurnal Tekhnicheskoy Fiziki, 1958, Vol. 28, Nr 3, pp. 636-646 (USSR)

ABSTRACT: With this paper a series of publications is started in which the attempt is made to determine the causes for the divergence between theory and experiment and to show ways for the further development of theory. At first the fundamental assumptions made in the network theory are analyzed. The fundamental error lies in the fact that the properties of the network are not derived on the basis of an investigation of them as a certain complete system, but in the investigation of the individual chains, taking into account the restrictions imposed

Card 1/3

Causes of the Deviations From the Kinetic Theory of High Elasticity. I. The Taking Into Account of the Modification of Transverse Dimensions of the Chains in Deformations of the Network

57-28-3-27/33

upon them by the network. The assumptions in the network-model of the theory are incorrect and to be objected to. Reference is made to the idea of the influence of foreign nodes near the respective chain, for the first time expressed by W. Kuhn (references 13 and 15) and it is shown that Kuhn's computation is incorrect. This computation is corrected here and the further development of Kuhn's conceptions is described. The individual stages of the network-deformation-process are investigated. It is shown that two circumstances - the incomplete equal and the restricting action of the foreign nodes - compel the authors to take into account the modification of the transverse dimensions of the chains in the case of deformation. The entropy in the initial and in the deformed state is computed and the equation (7) for the modification of the free energy is derived. The experimental data are compared with equation (7). The comparison shows that in spite of a number of simplifying assumptions by which the investigation performed here receives a qualitative nature the obtained relation (7) better agrees with the experiment than any existing theory. There are 4 figures, and 19 references, 4 of which are Soviet.

Card 2/3

Causes of the Deviations From the Kinetic Theory of High Elasticity. I. The Taking Into Account of the Modification of Transverse Dimensions of the Chains in Deformations of the Network 57-28-3-27/33

ASSOCIATION: Nauchno-issledovatel'skiy institut shinnoy promyshlennosti, Moskva (Moscow, Scientific Research Institute of the Tire Industry)

SUBMITTED: December 30, 1956.

1. Elasticity--Theory 2. Mathematics

Card 3/3

REZNIKOVSKIY, M.M.; PRISS, L.S.; KHROMOV, M.K.

Effect of rubber composition on its fatigue characteristics [with summary in English]. Koll. zhur. 20 no.3:368-375 '58. (MIRA 11:8)

1. Nauchno-issledovatel'skiy institut shinnoy promyshlennosti, Moskva.

(Rubber—Testing)

69-20-3-18/24

AUTHORS: Reznikovskiy, M.M.; Priss, L.S.; Khromov, M.K.

TITLE: The Effect of the Composition of Rubber on Its Fatigue Characteristics (Vliyaniye sostava reziny na yeyë ustalostnyye svoystva)

PERIODICAL: Kolloidnyy zhurnal, 1958, vol XX, Nr 3, pp 368-375 (USSR)

ABSTRACT: In tires, shock absorbers, etc rubber is under frequent stress. In many other products, like packings, the rubber is under continuous static stress. In all these cases the most important property of the rubber is fatigue resistance. In the article, the fatigue resistance of rubber in relation to type, degree of vulcanization, filling, and plastication is studied. Natural rubber and the synthetic rubbers SKB and SKB-30, all samples without filler and with 40 parts of black per 100 parts of rubber weight, are tested. The results are given in Figure 2. The filling has only a slight influence on the fatigue resistance of the rubber. The fatigue characteristics in stresses with alternating signs are determined by the rubber. Rubber type SKB shows better results than the other types, including natural rubber. The influence of the vulcanization degree on the fatigue properties is shown in Figure 4. The

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69-20-3-18/24

The Effect of the Composition of Rubber on Its Fatigue Characteristics

fatigue deformation reaches a maximum at a sulfur dose of 1.8%. This dose corresponds to that used in technical rubber. The influence of the filler content was investigated in SKS-30 vulcanization with doses of 0; 2; 5; 10; 15; 20; 30; 40; 60; 80; and 100 parts of filler per 100 parts of rubber. Figure 5 shows that the fatigue resistance increases with the black content in rubber. The degree of plastication also influences the fatigue properties. Vaseline oil was used as plasticizer. The fatigue properties reach a maximum at a plasticizer content of 20 weight parts. There are 7 graphs, 2 tables, and 5 Soviet references.

ASSOCIATION: Nauchno-issledovatel'skiy institut shinnoy promyshlennosti, Moskva (Scientific Research Institute of the Tire Industry, Moscow)

SUBMITTED: February 25, 1958

Card 2/2 1. Rubber--Fatigue 2. Rubber--Stresses 3. Rubber--Vulcanization

CA 27

PRISS, M.

Rapid determination of moisture contents in seed meats.
M. Priss. *Maslobolno Zhirovoe Delo* 12, 234 (1936).
Accurate results are obtained by drying 2-g. samples at
130° for 10 min. Chas. Blane

AS A U.S.A. METALLOGRAPHIC LITERATURE CLASSIFICATION

PRISS M.

ca

12

Determination of the fineness of seed meal. M. P. 1111. In the Mashoboluo Zhivotov Pels 13, No. 6, 26.10.11. In the usual procedure of classification the nested sieves of various mesh are rotated mechanically by means of an elec. motor for 5 min. at the rate of 230 rotations per min. Chav. Blanc. The app. is illustrated.

ASH-SLA METALLURGICAL LITERATURE CLASSIFICATION

USSR/Medicine - Blood Transfusion Sep/Oct 51

"Effect of Blood Components on the Rate of Oxidation of Ascorbic Acid," F. T. Sukhenko, N. N. Priss, V. P. Radushkevich, Chair of Biochem, Novosibirsk Med Inst, and Novosibirsk Blood Transfusion Sta

"Biokhim" Vol XVI, No 5, pp 385-389

Citrates as compared with phosphates inhibit oxidation of ascorbic acid (I) in the presence of undestroyed erythrocytes and their hemolysates and in their absence. Whole blood, plasma, erythrocytes and their hemolysates, coverings and content of erythrocytes inhibit, 202T78

USSR/Med.cine - Blood Transfusion Sep/Oct 51
(Contd)

but do not prevent oxidation of I. It is probable that in addn to catalase, amino acids, and sulphydryl groups, blood proteins (particularly lipid-protein complexes of erythrocyte coverings) play an essential role in stabilizing I in blood.

PRISS, N. N.

202T78

FRISS - NIN

Med Vitaminization of natural and dried blood plasma. P. I. Sukhenko and N. N. Priss (Med. Inst. and Transfusion Sta., Novosibirsk). Vopr. Med. Khim. 2, No. 1, 32-9 (1958). Ascorbic acid (I) was dissolved at 100, 500, and 1000 mg. % in H₂O and in the following solns.: physiol. saline, 6% neutral Na citrate, 3.5% Na acid citrate, 40% glucose, and No. 7 blood preservative; solns. were titrated to det. I concn. with 2,6-dichloroindophenol before and after autoclaving at 118-22° for 30 min. At 100 mg. % of I, losses were 11.9-33.1%; at 500 mg. %, 4.3-12.7%; at 1000 mg. %, 1.4-14.6%. In another series I was added to plasma (II) from fresh citrated blood at 50, 100, 200, and 400 mg. % and its concn. detd. as % of original before and after pptn. of proteins with Cl₃CCO₂H; av. losses of I before and after pptn. were 3.8-6% and 12-19%, resp. In another series II contg. I was sealed into ampuls with air without thiamine (III) at a predetd. II/air (vol./vol.) ratio; without showed that addn. of III was some help in preventing oxidation of I but that the relative vol. of air present was more important; max. length of preservation of I in II was 28 days. When II contg. I at 177-387 mg. % was sealed into ampuls under air, CO₂ in a vacuum, or completely filling the ampul, I was no longer present after 20 days under air, but only 2.4-3% was lost after 70 days (max. length of expt.) when ampuls were completely filled. I in 40% glucose soln. was mixed with II to give I concn. of 85-382 mg. %; this mixt. was dried and sealed in evacuated ampuls or those contg. air or CO₂. After 75 days the concn. of I in ampuls evacuated or contg. air was 94.5 and 72.8%, resp. of original concn.; after 180 days 82 and 60.3%, resp. Moisture unfavorably influenced the preservation of I and dried II.

20000 Biochemistry

Cyrus C. Sturgis, Jr.

PRISS, V.N.

Functional disorders following the treatment of tuberculous pleural
empyema by the aspiration method. Probl. tub. 42 no.3:36-39 '64.
(MIRA 18:1)

1. Novosibirskiy nauchno-issledovatel'skiy institut tuberkuleza
(direktor M.V.Svirezhev) i protivotuberkuleznyy dispanser No.11
Novosibirska (glavnyy vrach F.Kh.Grigorenko).

KHOTENKO, M.P., starshiy nauchnyy rabotnik; PRISTAPCHUK, L.S. [Prystapchuk, L.S.], starshiy nauchnyy rabotnik

Lowering costs of tractor operations. Mekh. sil'. hosp. 9 no.10:
8-10 0 '58. (MIRA 11:10)

1. Ukrainskiy nauchno-issledovatel'skiy institut elektrifikatsii
sel'skogo khozyaystva.
(Tractors)

KHOTENKO, M.P., starshi nauchnyy rabotnik; PRISTAPCHUK, L.S., [Prystapchuk, L.S.]
starshiy nauchnyy rabotnik

Use of tractors on a leading collective sugar beet farm. Mekh. sil'
hosp. 10 no.4:14-16 Ap '59. (MIRA 12:6)

1.Ukrainskiy nauchno-issledovatel'skiy institut ekonomiki i organizatsii
sel'skogo khozyaystva.

(Tractors) (Sugar beets)

PRISTAPCHUK, L.S. [Prystapchuk, L.S.]; KHOTENKO, M.P.; LUPKO, A.Ya., red.;
~~NEZHENKO, I.Yu., tekhn. red.~~

[Organization of the use of machines and tractors in collective farms] Organizatsiia vykorystannia mashynno-traktornoho parku v kolhospakh. Kyiv, Derzh. vyd-vo sil's'kohospodars'koi lit-ry URSR, 1960. 226 p. (MIRA 14:10)
(Farm mechanization)

TOMKA, Ondrej, inz. CSc.; PRISTAS, Jozef

Development of bird's-foot trefoil (*Lotus corniculatus* L.)
in single crop and mixed crop and its pasture and hay
yields. Rost výroba 10 no. 3:235-250 Mr '64.

1. Research Institute of Meadows and Pastures, Poprad.

TARAN, P., kand.tekhn.nauk; PRISTAVKA, A.; ZYMALEV, G.; SHALIMOV, A.;
SEVAST'YANOV, V.

Speeding-up the rate of increase of labor productivity in the
Dnepropetrovsk Economic region. Sots. trud 5 no.9:98-108 S '60.
(MIRA 13:10)

1. Glavnyy inzh. tresta "Leninruda" (for Taran).
2. Zam.nachal'nika
tekhnicheskogo otdela tresta "Leninruda" (for Pristavka).
3. Upravl-
yayushchiy trestom "Dzerzhinskkruda" (for Zymalev).
4. Nachal'nik
otdela organizatsii truda tresta "Dzerzhinskkruda" (for Shalimov).
5. Zam. direktora po trudu i kadram zavoda im. Dzerzhinskogo
(g.Dneprodzerzhinsk) (for Sevast'yanov).
(Krivoy Rog Basin--Iron mines and mining--Labor productivity)
(Dneprodzerzhinsk--Steel industry)
(Socialist competition)

PRISTER, G.

Matis' calculator; method for angular designs (Nalenz, Hofer, Schramm). p. 16.
(Zeleznice, Vol. 13, no. 3, March 1957. Beograd, Yugoslavia)

SO: Monthly List of East European Accessions. (EEAL) LC. Vol. 6, No. 7.
July 1957. Uncl.

PRISTAVFA, D., VOTICKY, Z.

"A New Method of Determining Sulfur." p. 1 (CHEMICKE ZVESTI, Vol. 5, No. 1/2, Jan./Feb. 1951) Bratislava, Czechoslovakia

SO: Monthly List of East European Accessions, Library of Congress, Vol. 3, No. 4, April 1954. Unclassified.

PRICTAVKA, D.

"Colorimetric determination of iron traces in the presence of ion IO_4^- ." *Chemické Zvesti*, Bratislava, Vol. 8, No. 7, Sept. 1954, p. 401.

SO: Eastern European Accessions List, Vol. 3, No. 11, Nov. 1954, L.C.

CZECH

Colorimetric determination of traces of iron in the presence of phosphite. D. Hrstavik, P. Schuler, and G. Hrstavik (Slovenia) and, Czech, Bratislava, Czech. J. Chem. Zvesti. 11, 1025 (1961). In the soln. contg. 2% HNO₃, PO₃³⁻ is protected by Bi³⁺ and Fe can then be detd. by the usual colorimetric method with thiocyanate. Jan Miska

PRISTAVKA D.

✓ The determination of ammonia in ammonium salts in the presence of urea by cadmium hydroxide. A modified method for the determination of the activity of enzymes. D. Pristavka and V. Krčmář (Sloven. vysoká škola tech., Bratislava, Czech.). *Chem. Zvesti* 10, 183-7 (1956) (German summary).—A method, based on the ability of urease to decomp. urea into NH_3 and $(\text{NH}_4)_2\text{CO}_3$, is described. NH_3 in the presence of urea is driven out from the NH_4 salts by $\text{Cd}(\text{OH})_2$ into $0.02N \text{ H}_2\text{SO}_4$. $\text{Cd}(\text{OH})_2$ in 5% emulsion, drives out NH_3 quantitatively and the urea during the distn. of NH_3 is not decompd. The decompn. of urea does not occur until 9-min. boiling. Boiling during the distn. of NH_3 is quiet with no foaming and the added albumin is immediately pptd. The blank expts. show max. value of 0.35 ml. of $0.02N \text{ H}_2\text{SO}_4$. Jan Mická.

7

CA

A new method of sulfur determination. Dotroslav
Pristavka and Zdeno Votický. *Chem. Zvesti* 5, 1-3 (1961).
A modification of the classical Carius method is reported.
The oxidation is carried out by KI, HNO₃, HCl which takes
place in 20-40 min. To 0.05-0.1 g. sample add 0.25-0.3 g.
KI, moisten with H₂O, add 10 ml. HNO₃, fume, and add 10
ml. HCl. Heat until the soln. decolorizes, cool, and dil. to
100-150 ml. with H₂O. If on diln. a ppt. is formed, add an
addnl. amt. of the oxidation mixt. S is then detd. either
gravimetrically as BaSO₄ or titrimetrically after pptn. with
benzidine-HCl. The method is satisfactory for both org.
and inorg. compds. The deviation from the classical
Carius method was found to be in the range of 0.04 to 0.39%.
Jan Micka

PRISTUPA, A. A., All Union Botanical Society

"Embryoless Seeds in Castor-Oil Plant," Dok. AN, 28, No 7, 1940.
Dept. Botany, State Pedagogical Institute, Rostov-on-Don

PRISTAVKA, Dobroslav, prof., inz.

Fast determining of inorganic elements in organic substances.
Chem zvesti 15 no.11/12:865-868 N-D '61.

1. Katedra analytickej chemie Slovenskej vysokej školy technickej,
Bratislava. Author's address: Bratislava, Kollarovo namesti 2,
Chemicky pavilon, Slovenska vysoka skola technicka.

PRISTAVKIN, Anatoliy Isakovich

[Camp fires in the taiga] Krasnyy yezhik. Moscow, Polit-
izdat, 1964. 190 p. (MIRA 18:2)

PRISTAVKIN, N.

Accumulate experience in organizing students' work. Politekh. obuch.
no.7:94 JI '58. (MIRA 11:8)

1. Staro-Selishchinskaya semiletnyaya shkola Mordovskoy ASSR.
(Field work (Educational method))

PRISTAVKIN, N.K., uchitel'.

Calculation of the socially useful work of students. Est. v shkole
no.5:77 S-O '56. (MIRA 9:10)

1. Staro-Selishchinskaya semiletnyaya shkola Bol'she-Ignatavskogo
rayona Mordovskoy ASSR.
(Agriculture--Study and teaching)

18

✓

Production of ferrous sulfate from spent acid. I. G. Antypko and E. I. Pristavko. *Coke and Chem. (U. S. S. R.)* 1939, No. 12, 47-9; *Khim. Referat. Zhur.* 1940, No. 8, 86-7. -- FeSO_4 is made by the action of spent H_2SO_4 on iron turnings. The wooden parts of the app. (reactors and crystallizers) should be lined and in the form of vats. Coke cannot be used for filtration. Wood wool is a satisfactory filtering material. Tech. data and the duration of the individual stages of the process are given. W. R. Henn

ASB-SLA METALLURGICAL LITERATURE CLASSIFICATION

FROM SOURCE

831687 100 000 101

PRISTAVKO
NINICH, V.N.; DRINFEL'D, P.I.; TSELYKOVSKAYA, N.K.; PRISTAVKO, F.I.

Waste water from the coumarone-indene resins section and possibilities for its decontamination. Koks i khim. no. 3: 46-47, 58.
(MIRA 11:3)

1. Kadiyevskiy koksokhimicheskiy zavod.
(Coke industry--By-products)
(Sewage--Purification)

68-58-3-11/22

AUTHORS: Nenich, V.N., Drinfel'd, P.I., Tselykovskaya, N.K.
and Pristavko, E.I.

TITLE: Effluents from the Indene-Coumarone Resin Plant and
Possibilities of Their Purification (Stochnyye vody tsekha
Inden-Kumarcnovykh smol i vozmozhnosti ikh obezvrezhivaniya)

PERIODICAL: Koks i Khimiya, 1958, Nr 3, pp 40 - 44 (USSR).

ABSTRACT: Biological treatment of coke oven effluents deteriorated
when the effluent from the Indene-Coumarone Resin Plant was
added. Methods of pre-treatment of this effluent were investi-
gated. It was found that the best results are obtained when the
neutralised effluent is passed through a vacuo-filter in order
to separate aluminium hydroxide (derived from aluminium chloride,
the catalyst used for polymerisation), then into a settling
tank for the separation of benzole. After the separation of
benzole, the effluent is passed into the biological treatment
tank. At present, an installation based on the above scheme
(Fig.5) is being designed. There are 4 tables and 5 figures.

ASSOCIATION: Kadiyevskiy koksokhimicheskiy zavod (Kadiyevka Coke
Oven Works)

Card 1/1

PRISTAVKO, F. I.

Distr: 4E43/4E3d/
4E26(3)

7 7
Waste waters from the indene-coumarin plant and the possibility of purifying them. V. H. Nepich, F. I. Pristavko, N. E. Tselykovskaya, and P. I. Pristavko. *Koks i Khim.* 1958, No. 3, 40-4. Up to the time of the introduction of wastes from the indene-coumarin plant the biochem. filter for eliminating phenol from the waste waters at the Kadievsk works operated successfully on an influent of 1043 to 1818 mg./l. of phenol to yield an effluent of 1 to 5. Subsequently, purification was seriously impeded and effluents with phenol values up to 600 mg./l. were observed. The disturbance was traced to the presence of suspended solids, mainly $Al(OH)_3$, originating in the alkaline hydrolysis of the $AlCl_3$ catalyst, and to benzene wastes also present. From various methods possible the one adopted for eliminating them embraced filtration with a vacuum drum filter, whereby a portion of the benzene was absorbed by the $Al(OH)_3$ filter cake, and gravity sepn. of the residual benzene and the water in decantation tanks, followed by normal biol. purification of the water. A diagrammatic sketch of the plant is shown.

H. I. Olin

8
2 May
3

gaf

PRISTAVKO, V.P.

Joint action of the fungus *Beauveria bassiana* (Bals.) Vuill. and
of small doses of DDT on larvae of the Colorado beetle
Leptinotarsa decemlineata Say. Dokl. AN SSSR 155 no.6:1475-1477
Ap '64. (MIRA 17:4)

1. Predstavleno akademikom A.A.Imshenetskim.

L 22239-66 EWT(1)/T JK

ACC NR: AP5026338

SOURCE CODE: UR/0220/65/034/005/0925/0928

AUTHOR: Pristavko, V. P.

23

ORG: Ukrainian Scientific Research Institute for Plant Protection,

8

Kiev (Ukrainskiy nauchno-issledovatel'skiy institut zashchity rasteniy,
Kiyev)

TITLE: Role of entomogenic bacteria of intestinal microflora in
microbiological control of harmful insects

SOURCE: Mikrobiologiya, v. 34, no. 5, 1965, 925-928

TOPIC TAGS: insecticide, bacteria, entomology

ABSTRACT: Compared to sporeforming bacteria, the use of nonsporeforming
entomopathogenic enteric bacteria or potential pathogens for control of
insects has been considered ineffective because of action mechanism
differences. Sporeforming bacteria entering the intestinal tract of an
insect kill it by formation of concentrated endotoxins, but nonspore-
forming bacteria, even in large doses, display very little pathogenicity
in the intestinal tract. On the other hand, the capacity of sporeform-
ing bacteria to multiply in the hemolymph and to pass from the intes-
tinal tract into the body cavity is poor and that of nonsporeforming

2

Card 1/2

UDC: 576.8:632,937,12

L 22239-66

ACC NR: AP5026338

0

bacteria is good. In studying the pathogenicity of nonsporeforming bacteria of the *Bac. thuringiensis* Berliner type, isolated from Colorado beetle larva, it was found that the bacteria administered in microbiological control doses is harmless for these larvae. But, with peroral administration of $5 \cdot 10^6$ *Bac. thuringiensis* bacteria cells, 50% of the larvae were killed. However, it was not *Bac. thuringiensis* that was isolated from the hemolymph of the killed larvae, but *Serratia marcescens* Bizio, a typical representative of potential insect pathogens. Thus, under the influence of *Bac. thuringiensis* the *Serratia marcescens* left the intestinal tract and entered the body cavity and insects died as a result of rapid multiplication of the bacteria in the hemolymph. For microbiological control of insects, the use of organosynthetic insecticides and "live insecticides" in some cases is reduced to activation of the entomogenic microflora, of which the nonsporeforming potential pathogenic bacteria are most important. Orig. art. has: none.

SUB CODE: 06/ SUBM DATE: 12Nov64/ SOV REF: 009/ OTH REF: 006

Card 2/2 nst

FRISTAVU, C

Physicochemical studies of aqueous solutions of meta- tungstic acid $H_9[H_2(W_7O_{21})_4]$ R. Ripan and C. Pristavu, *Acta Chim. Acad. Sci. Hung.* 16, 83-90 (1958) (in French). Conductometric data confirm a strong acidity of 8 and a total acidity of 10 H^+ . Decompn. reactions with bases and metal ions prove the relative instability of the mol. and the existence of pyrotungstic radicals. The results confirm that the min. structure of aquo-12-tungstic acid corresponds, in aq. soln., to the Rosenheim formula (cf. R. and Jaenicke, *C.A.* 6, 3377): $H_9[H_2(W_7O_{21})_4] \cdot x H_2O$. J. B. Austin

3
AEW
2-11-58

Country : HUNGARY
 Category : Inorganic Chemistry. Complex Compounds
 Abs. Jour. : Ref Zhur-Khim, 1959, No 5, 1422
 Author : Ripan, R.; Paistavu, G.
 Institit. : Hungarian Academy of Sciences
 Title : Physicochemical Study of the Aqueous Solution of
 Metatungstic Acid $H_{10}[H_2(W_2O_7)_6]$
 Orig. Pub. : Acta chim. Acad. scient. hung., 1958, 16, No 1,
 83-90
 Abstract : By conductometric titration of metatungstic acid
 (MTA) with solutions of NaOH, NH_4OH , $NaHCO_3$,
 guanidine, salts of Ba, Pb and Ti, it was estab-
 lished that MTA corresponds in phenol solution
 to $H_{10}[H_2(W_2O_7)_6] \cdot xH_2O$. MTA is a strong hexabasic
 acid. The last 4 atoms of H in the outer range
 of MTA are characterized by considerably lower
 constants of ionization. In the process of neu-
 tralization, ions of pyrotungstic acid are
 formed from MTA.-- B. Kaplan

Card: 1/1

C - 7

KUCLOV, V.A.; IRINAY, Ya.P.; BORISOV, V.K.

Differences of hematological changes in acute form of leukemia in years of maximal and minimal solar activity. Dokl. Akad. Nauk SSSR, 1963, no. 2:41-45. '63. (U.S.S.R.:10)

KOZLOV, V.A.; PRISTAY, Ya.P.

Effect of the season of the year on the course of hypertension
in Transbaikalia. Sovet. med. 27 no.6:110-113 Je'63
(MIRA 17:2)

1. Chitinskiy meditsinskiy institut (rektor - dotsent Yu.D.
Ryzhkov).

CHIGRIN, V.; AKHREMCHUK, B.; PRISTENNIY, A., shofer; BOYKOV, V., shofer-otlichnik; KHALABUZAR', L.

Drunkards should not drive. Avt. transp. 36 no.9:46 S '58.

(MIRA 11:10)

1. Direktor avtoekspeditsionnoy bazy Dzhahalal-Abadskogo oblpotreboyuza Kirgizskoy SSR (for Chigrin). 2. Nachal'nik Sortaval'skoy avtotransportnoy kontory (for Akhremchuk). 3. Taldy-Kurganskaya avtobaza, Kazakhskaya SSR (for Pristenny). 4. Lyuberetskaya avtokolonna No.34 (for Boykov). 5. Direktor Mushketovskoy avtobazy avtotresta kombinata "Stalinshakhtstroy" (for Khalabuzar').

(Drinking and traffic accidents)

PRISTENSKIY, P.

City intelligentsia aids collective farm workers. Sov.profsoiuzy
7 no.9:25-26 My '61. (MIRA 14:4)

1. Predsedatel' Novosibirskogo obkoma profsoyuza rabotnikov kul'tury.
(Novosibirsk Province—Culture) (Trade unions)

SOBACHKIN, A.A.; PRISTER, B.S.

Determining the molybdenum content of seeds by the polarographic method. Izv. TSKHA no. 5:113-120 '62. (ISRA 16:7)

(Seeds) (Plants, Effect of Molybdenum on)
(Polarography)

MOGILEVKIN, V.B.; SOBACHKIN, A.A.; PRISTER, B.S.

Neutron activation analysis in determining molybdenum in plant tissues
[with summary in English]. Izv. TSKHA no.1:105-124 '62. (MIRA 15:6)
(Radioactivation analysis) (Plants—Chemical analysis). 7
(Molybdenum)

PRISTER, G.

Wrinkling of rails. II. p. 1563.
(Tehnika, Vol. 11, no. 10, 1956. Beograd, Yugoslavia)

SO: Monthly List of East European Accessions. (EEAL) LC. Vol. 6, No. 7,
July 1957. Uncl.

PRISER, G.

XKZ thermit for welding U joints in rails. p. 11.
(GLASNIK, Vol. 13, No. 7, July 1957)

SO: Monthly List of East European Accessions (SEAL) IC Vol. 6, No. 12, Dec. 1957
UNCL.

PRISTER, Guido, prof. inz. (Zagreb)

Elastic fastening of rails. Gradevinar 14 no.3:65-69
Mr '62.

PRISPER, G.

Wrinkling of rails, I (to be cont.) p. 1244. TEHNIKA (Savaz inženjera i
tehnicara Jugoslavije) Beograd. Vol. 11, no. 8, 1956.

SOURCE: East Europe Accession List (EEAL),
Library of Congress, Vol. 5, no. 11, Nov. 1956

PRISTER, G.

PRISTER, G. The calculation for a roadbed according to Jaehn. . 1

Vol. 12, no. 12, Dec. 1956

ZELEZNICE
TECHNOLOGY
Beograd

So: East European Accession, Vol. 6, no. 3, March 1957

PRISTEK, Guido, prof., ing. (Zagreb, Venovec 41.)

Construction of crane roads similar to railroad tracks. Tehnika
Jug 19 no.1:Suppl:Saobracaj 11 no.1:162-169 Ja '64.

1. Građevinski fakultet Sveučilišta u Zagrebu.

PRISTINA, R. A.

~~XX~~

Dravert, I. S., Pristina, R. A., and Trofimova, I. L. "An analysis of the illness rate of scarlet fever in the city of Kirov in the post-war period," Trudy Kirovskogo in-ta epidemiologii i mikrobiologii, Collection 2, 1948, p. 94-102, - Bibliog: 13 items.

SC: U-3736, 21 May 53, (Letopis 'Zhurnal 'nykh Statey, No. 17, 1949).

PRISTINA, R. A.

Pristina, R. A. "Experience from checkups on children of the effectiveness of the complex vaccine against scarlet fever and diphtheria," Trudy Kirovskogo in-ta epidemiologii i mikrobiologii, Collection 2, 1948, p. 160-64.

SO: U- 3736, 21 May 53, (Letopis 'Zhurnal 'nykh Statey, No. 17, 1949).

ALFIMOV, M.V.; BUBEN, N.Ya.; PRISTUPA, A.I.; SHAMSHEV, V.N.

Excitation by fast electrons of the triplet states of naphthalene molecules in solid solutions. Dokl. AN SSSR 156 no. 3: 630-633 '64. (MIRA 17:5)

1. Institut khimicheskoy fiziki AN SSSR. Predstavleno akademikom V.N. Kondrat'yevym.

KRYVANSKYI, I.M.; PRISTYKO, M.V.; PRISTYKO, M.V. 1961-1962
(Armed Forces, 1961)

Experimental study of cartilage metabolism. In: 1961-62
PUBL. Ser. Biol. med. no. 1117-1120. 1961. (MPL) 1: 1-4

PRISTOUPI, J.

CZECH

A simple sprayer for chromatography. J. Pristoupil
(Ústav hematologie, Prague). Chem. Listy 48, 136 (1954).

A simple sprayer is designed consisting of an Erlenmeyer
flask, of a twice-bent capillary tube reaching to the bottom,
and of a nozzle attached horizontally to the rubber stopper.
M. Hudlický

KOSTER, J.V.; PRISTOUPIK, T.I.

Isolation of creatinine and glycocholate with paper chromatography.
Cesk. farm. 1 no. 11-12:647-649 1952. (CML 24:1)

1. Of the Institute of Biochemistry of Charles University and of the
Third Internal Clinic of State Faculty Hospital, Prague.

PRISTOUPIL, TOMAS

Paper chromatography of glucocyclamide in urine.
Josef V. Kostit and Tomáš I. Přistoupil (Karl's Univ.,
Praha, Czech.). *Casopis Lékařů Českých* 92, 188(1953).
Urine was subjected to paper chromatography with H₂O-
satd. PhOH, BuOH, and H₂O in the ratio 1:1:2 on What-
man No. 1 or S. & S. 605 paper at 18°. It was discovered
that some glucocyclamide (I) is present besides the creat-
inine (II), but the presence of I does not falsify the results
of a II detn. with the Jaffe reaction by the usual method.
The ratio of II:I is always 6:1 to 3:1 in normal urines and in
those from patients with diabetes mellitus, liver cirrhosis,
chronic nephritis, myositis ossificans, and other diseases.
Werner Jacobson

1717001 14 17

Czechoslovakia/Analytical Chemistry - Analysis of Organic Substances, G-3

Abst Journal: Referat Zhur - Khimiya, No 1, 1957, 1303

Author: Pristoupil, T. I., Tomanova, V., and Niko, J.

Institution: None

Title: Nephelometric Determination of Gelatin

Original

Periodical: Chem. listy, 1956, Vol 50, No 3, 386-387 (published in Czech)

Abstract: Precipitation with tannic acid (0.3% solution in a physiological solution) is used in the determination of the gelatin concentration (I) in various biological liquids. The degree of turbidity at an optimum pH (4.5-5.5) is measured with a Langer photocolormeter, using a green filter (the measurement is made 25 minutes after the mixing of the reagent). Calibration curves are constructed both for the solution of I and for the product of its partial acid hydrolysis (PH) (the viscosity of a 5% solution of hydrolysate at 20° is 1.5-1.7). For I the reaction proceeds best when the concentration of I is 0.5-5 mg/ml; the best concentration for PH is 0.01-0.5 mg/ml. Concentrations of

Card 1/2

Czechoslovakia/Analytical Chemistry - Analysis of Organic Substances, G-3

Abst Journal: Referat Zhur - Khimiya, No 1, 1957, 1303

Abstract: NaCl of less than 1% interfere. When I is determined in the presence of plasma proteins, the proteins must be precipitated first (a 5% solution of CCl_3COOH is used). The calibration curve is linear and the error is $\pm 10\%$. The concentration of I can also be determined by the Rodgers method. The degree of turbidity produced after the addition of the appropriate amount of concentrated H_2SO_4 to the filtrate obtained from the sample after precipitation with 50% CCl_3COOH is determined colorimetrically.

Card 2/2

ARAS - 10/11/51

✓ Turbidimetric determination of despecified bovine serum
in biological material. Věclava Frišová and Tomáš I.
Přítomný (Ústav hematol. krevní transfuze, Prague).
Chem. listy 51, 383-6(1957).—A modified quant. detn. is
described by direct photometric measurement of turbidity
which arises after beef plasmaa. despecified according to
Massons (*Lancet* 1946, 2241), has been adjusted to pH 4.2 by
addn. of AcOH buffer. The method requires as little as 0.2-
ml. blood. J. Urbánek

PRISTOUPIK, TOMAS J.

Investigation of the formation of surface films by proteins.
 Tomas J. Pristoupik (Czechoslovakia, born in Prague).
 Chem. July 51, 1962-8 (1957).--The course of formation of surface films of albumin, trypsin, pepsin, hemoglobin, and hydrochloride of globin on distd. H₂O (pH 6.1), 0.02N H₂SO₄, and 0.02N NaOH was followed by continuous photographing of the boundary between the dark film of the protein and the light film of the indicator oil which was placed on the surface of the liquids prior to applying the protein. Expansion curves characteristic for the above proteins were obtained.

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PRISTOUPI, TOMAS IVAN

NIKL, Jan; PRISTOUPI, Tomas Ivan

Czechoslovakian preparation of non-specific plasma for transfusions.
Cas. lek. cesk. 96 no.20:614-617 17 May 57.

1. Ustav hematologie a krevni transfuze, reditel MUDr. J. Kidery.
(PLASMA SUBSTITUTES
new non-specific plasma prep. (Cz))

PRISTUPIL, Tomas Ivan; FRICOVA, Vaclava

Simple automatic fraction collector. Czech Party 52 10. 1
667-669 Je '64.

1. Institute of Hematology and Blood Transfusion, Prague.

TRICOVA, V.; PRISTOUPIL, T.I.

Degree of enzymatic decomposition of modified bovine serum
albumin. Cesk. farm. 12 no.4:191-193 My '63.

1. Ustav hematologie a krevni transfuse, Praha.
(SERUM ALBUMIN, BOVINE) (TRYPSIN)
(CHYMOTRYPSIN) (PEPSIN) (CHEMISTRY, ANALYTICAL)

PRISTOUPIL, T.I.; FRECOVA, V.

Some changes in the sulfur groups in modified proteins. Cesk. farm.
12 no.3:134-137 Mr '63.

1. Ustav hematologie a krevni transfuze, Praha.
(BLOOD PROTEINS) (SULFUR) (HEAT) (FORMALDEHYDE)
(HYDROGEN PEROXIDE) (CHEMISTRY) (SULFIDES)

CZECHOSLOVAKIA

V. FRICOVA and T. I. PRISTOUPEL, [Affiliation same as above.]

"Enzymatic Decomposition of Modified Bovine Serum Albumin."

Prague, Ceskoslovenska Farmacie, Vol 12, No 4, May 68; pp 191-193.

Abstract [English summary modified]: Trypsin, chymotrypsin and pepsin hydrolysis of specimens of bovine serum albumin, either native or denatured by heat, formalin, oxidation were studied by biuret and ninhydrin methods. Denatured samples decomposed to a higher degree than native ones. Table, 4 graphs; 3 Czech (1 patent) and 3 Western references.

E/1

PRISTOUPIL, Vladimir, dr.

Problem of cyanide and potassium salt production and utilization
of the carbon dioxide waste. Prum potravin 14 no.5:245-246 My '63.

1. Ustav geochemie a nerostnych surovin, Ceskoslovenska akademie
ved, Praha.

2

Handwritten mark: a stylized 'A' or 'C' with a checkmark.

Laboratory filtration. V. Phistouril. *Chem. Obzor* 6, 1 11(11 English)(1931) - The fundamental requirements in the filtration are given in detail, the app. used for automatic filtration described and several analytical methods modified so as to reduce to a min. the difficulties encountered in the filtration. The prepn. of the ppt. in the most suitable form for the filtration can be obtained in most cases by following the analytical procedures carefully. In the sepn. of Al some org. precipitants, such as hy-droxiquinoline, are used with success. The vacuum required has to be rather small 1-10 cm Hg for filter papers, 10-20 cm Hg for ceramic filters. The selection of a suitable material, which is given in tables, must be adapted to the nature of the ppt. J. K.

ASH 55.4 METALLURGICAL LITERATURE CLASSIFICATION

CO

9

Nickel-copper ore of Sluknov. V. Plistoupil. *Chem. Abstr.* 11, 42-6 (in English 46) (1938). The Ni-Cu ore of Sluknov belonging to the normal type of Ni pyrrhotites and deposited in the proterobase can be floated and smelted by hydrometallurgic methods as shown on a lab. scale. J. Kučera

AS - SLA METALLURGICAL LITERATURE CLASSIFICATION

1ST AND 2ND GROUPS										PROCESSES AND PROPERTIES MORE										3RD AND 4TH GROUPS									
BC										Preparation of zinc chloride by thermal chlorination. V. F. Finkovskii (Chem. Abstr., 1937, 12, 125-126). Treatment of a zinciferous ore in the dry state with Cl_2 at a high temp. is of no importance for the prep. of ZnCl_2, usually obtained as a by-product, except in the case of a complex ore where the more usual methods fail. A roasted blende containing Cu 4.0, Zn 5.4, Pb 1.2, Fe 5.8; and S 2.1% was examined, and chlorination carried out with 60-80% Cl_2 for 3 hr. at 500-550°. Temp. of 450° and above tended to cause slugging which reduced the mixing of the blende. The product was triturated and worked up in the usual way to ZnCl_2. The residue was mainly Fe_2O_3.										B-1-5									
A.S.P.-S.A. METALLURGICAL LITERATURE CLASSIFICATION																													
SOURCES										CLASSIFICATION										REFERENCES									

BC

B-I-8

Wet-chlorination process for preparation of zinc chloride. V. P. Pashov (Chem. Abstr. 1937, 12, 217-221).—The usual wet process using Cl_2 gas is simplified for flotation blends by omitting the FeCl_3 catalyst, which has otherwise to be removed from the product. The products are ZnCl_2 solution of arbitrary concn. and elementary Zn. The process, which requires $\frac{1}{4}$ of the total Zn to be added as roasted blends, is regarded as solved technically, but as presenting no economic advantage over present practice.

ASB-SLA METALLURGICAL LITERATURE CLASSIFICATION

12

137 AND 138 (OVER)

139 AND 140 (OVER)

141 AND 142 (OVER)

143 AND 144 (OVER)

145 AND 146 (OVER)

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149 AND 150 (OVER)

151 AND 152 (OVER)

153 AND 154 (OVER)

155 AND 156 (OVER)

157 AND 158 (OVER)

159 AND 160 (OVER)

161 AND 162 (OVER)

163 AND 164 (OVER)

165 AND 166 (OVER)

167 AND 168 (OVER)

169 AND 170 (OVER)

171 AND 172 (OVER)

173 AND 174 (OVER)

175 AND 176 (OVER)

177 AND 178 (OVER)

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A study of the chemical technology of vanadium. V. Pistoia. *Chem. Ind.* 13, 31-41, 55-9 (1968) (English summary). - After reviewing the hydrometallurgical processes used for sepg. V, the course of hydrolysis of NaVO_3 or KVO_3 in an acid soln. (H_2SO_4) was studied. The effect of acidity or of the oxidizing power of the medium was insignificant in comparison with the effect of the excess of K_2SO_4 or Na_2SO_4 . The most complete and useful pptn. of V occurred when the concn. was 15 g. V_2O_5 per l., when the addn. of H_2SO_4 was 12% of the equiv. of NaVO_3 or 80% of the mol. equiv. of the KVO_3 , and when the temp. was 90° , although the rate of hydrolysis did not change very much in the range 75- 92° . In general, it was easier to work with K salts than with Na salts. Even a small addn. of NaVO_3 to a KVO_3 soln. shifted and left the hydrolysis incomplete. Addns. of Na_2SO_4 to a KVO_3 soln. made the pptn. of V_2O_5 worse; further addns. of Na_2SO_4 up to a concn. of 100 g. per l. made the pptn. worse; still higher concns. of Na_2SO_4 improved the pptn. of V_2O_5 . Addns. of K_2SO_4 to solns. of V salts contg. Na_2SO_4 paralyzed the effect of the Na_2SO_4 . Under optimal conditions, the hydrolysis of KVO_3 in a H_2SO_4 medium occurred in a few min. but had to be preceded by a longer incubation period. Even under optimal conditions, the pptd. V_2O_5 always contained occluded alkalis and had to be purified for special work.

Frank Marresh

ASM-SLA METALLURGICAL LITERATURE CLASSIFICATION

1ST AND 2ND ORDER										3RD AND 4TH ORDER									
PROCESSES AND PROPERTIES INDEX																			
CA Inorganic industry in Czechoslovakia. Vlastislav Tris- toupil. Chem. Obzor 22, 123-25 (1947). The immediate tasks of this industry have been set up by the national two- year economic plan 1947-48. Jan Micka. 18																			
ASB-SLA METALLURGICAL LITERATURE CLASSIFICATION																			
1ST ORDER										2ND ORDER									
SUBJECT										REFLECTION									
SUBJECT										REFLECTION									

COMMON ELEMENTS										PROCESS AND PROPERTIES INDEX										1ST AND 2ND ORDERS										3RD AND 4TH ORDERS									
CA																														18									
Estimation of the catalytic effect in the manufacture of contact sulfuric acid. V. Pfitzoupi and K. Panul. <i>Chem. Obsor</i> 24, 49-54(1949).—While the Reich method was found satisfactory for the analyses of the pyrite gases before contact, the same method for the gases after contact was unsatisfactory. H_2SO_4 for washing SO_2 should be satd. with SO_2 at the concn. in the contact gases. Instead of a washing flask contg. 2 l. of H_2SO_4, only 10 ml. was used which was sufficient for 20 detns. if carried out one after another. Mostly erratic results were obtained owing to the soly. of SO_2 in washing H_2SO_4 if the optimum conversion was not achieved in the contact gases. J. Micka																																							
ASB-51A METALLURGICAL LITERATURE CLASSIFICATION																																							
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PRISTOUPIL, V.

"Important Trends in Research Work Carried Out by the Czechoslovak Chemical Industries in the Period Before Nationalization." p. 9, Praha, Vol. 4, no. 1, Jan. 1954.

SO: East European Accessions List, Vol. 3, No. 9, September 1954, Lib. of Congress

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"Review of the general situation of raw materials from the point of view of technology."
Chemicky Prumysl, Praha, Vol. 4, No. 6, June 1954, p. 208.

SO: Eastern European Accessions List, Vol. 3, no. 11, Nov. 1954, L.C.

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A060/A000

AUTHOR: Anděl, J., Přistoupilová, J.

TITLE: Economic planning of the number of observations in the study of regression

PERIODICAL: Referativnyy zhurnal, Matematika, no. 1, 1963, 28 - 29, abstract 1V113 (Activ. nerv. super., 1962, v. 4, no. 1, 87 - 92; Czech; summaries in Russian, English)

TEXT: The article discusses the problem of determining the minimal sample size on the basis of the already obtained observations by the study of the regression of the random variable with respect to t - playing the role of time. In the case of a normally distributed variable X with dispersion σ^2 independent of t , it is demonstrated that, if at $t = t_1$ one makes an independent random sampling of size n_1 then the size of the sample n_2 at $t_2 > t_1$ ensuring a 100(1- α)% confidence interval of length 2Δ for the mean value of the quantity X , has the form

$$n_2 = \frac{t^2(\alpha; n_1 - 1) n_1 s_1^2}{\Delta^2 (n_1 - 1)}$$

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Economic planning of the number of observations

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where $t(\alpha; n-1)$ is the $100\alpha\%$ critical value of the Student distribution with $n_1 - 1$ degrees of freedom, and s_1^2 is the sample dispersion calculated from the observations of the variable X at the instant t_1 . If at the instants $t_1, \dots, t_k$ the sample sizes $n_1, \dots, n_k$ are obtained, then the following recurrence relation

$$n_{k+1} = \frac{t^2 \left(\alpha; \sum_{i=1}^k n_i - k \right) \sum_{i=1}^k n_i s_i^2}{\Delta^2 \left(\sum_{i=1}^k n_i - k \right)}$$

holds, where s_i^2 ($i = 1, \dots, k$) are the sample dispersions. The authors calculate the mean value $M(n_2)$ for constant n_1 and the mean value of $M(n_{k+1})$ for constant $n_1, \dots, n_k$, and establish the lower bound of the sequence $\{M(n_k)\}$.

Author's summary

[Abstracter's note: Complete translation]

Card 2/2

PRISTOL PIZOVA, J.

